



Product Support . . .

For the

21st
Century



Reengineering Product Support

Leadership Direction

- **SECDEF directed USD(A&T) to *Restructure Sustainment for the 21st Century***
 - Reengineering Product Support
 - Competitively Source Product Support
 - Expand Modernization through Spares
 - Expand Prime Vendor/Virtual Prime Vendor
- **USD(A&T) chartered the Product Support Reengineering Implementation Team to focus on implementation**
 - Define Scope and Context of Product Support
 - Support Joint Vision 2010 and the DoD Logistics Strategic Plan
 - Examine ongoing examples of Reengineered Product Support
 - Develop Product Support Plan of Action -- **Don't Study, Define Implementation**

***912 Report to Congress April
1998***

Reengineering Product Support

Implementation Strategy Successfully Developed

- **Implementation Team established under DUSD(L) leadership**
 - Senior Steering Group (Military Services, JCS, OSD)
 - Four subgroups (over 100 participants)
 - Expand Modernization through Spares
 - Expand Prime Vendor/Virtual Prime Vendor
- **Implementation Team completed 7 months of implementation planning**
 - Baselined current processes and initiatives
 - Researched best practices
 - Identified key implementation elements
- **Published draft implementation plan in April 99**
 - Comments received from Services, DLA, JCS, JLC, OSD, and industry
- **Final report published July 1999**

Final Report

Product Support for the 21st Century

For report copies go to:

<http://orion.lmi.org/912ps>

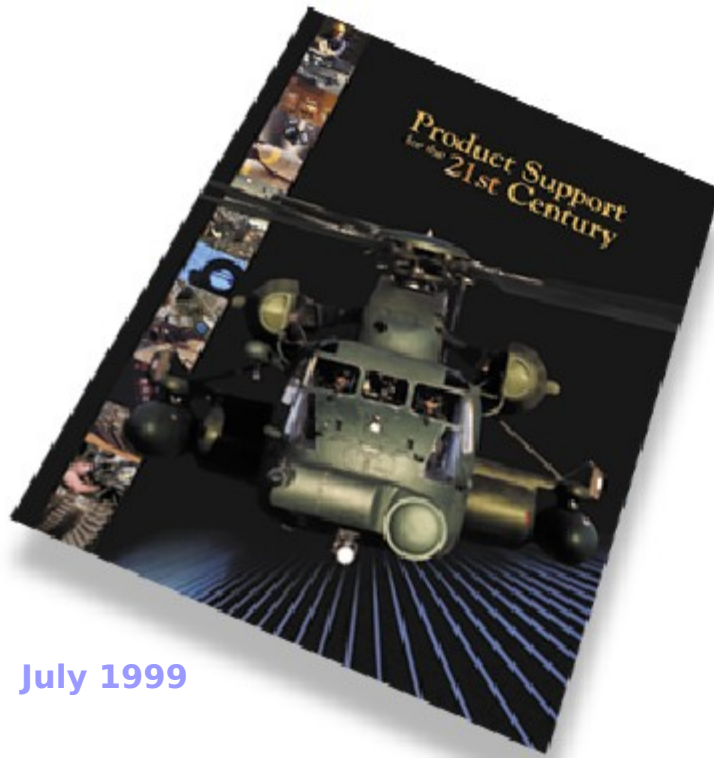
or

<http://ambassador.acq.osd.mil/acqref/>

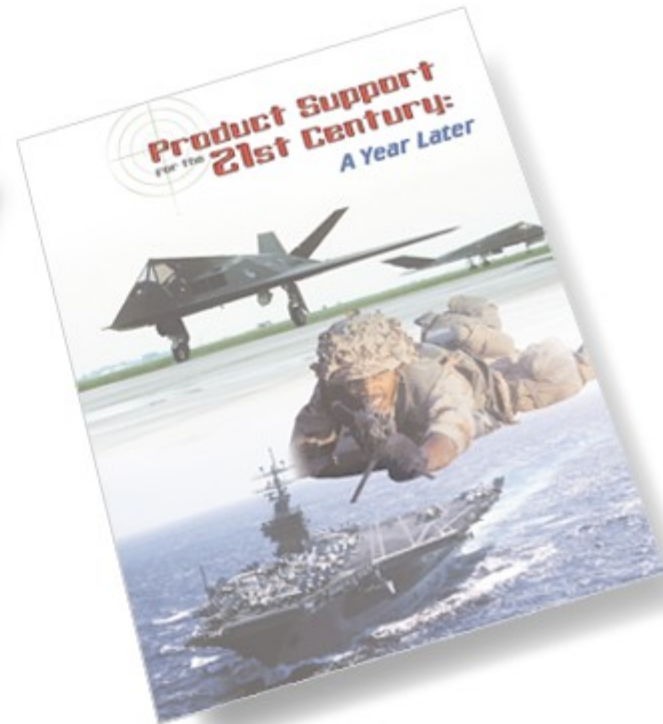


Product Support Reports

Product Support for the 21st Century



July 1999



September 2000

For more information, visit:

<http://www.lmi.org/virtualipt/secure/geninfo.html>

or <http://www.acq.osd.mil/ar/section912/>

Our Focus

Restructure Sustainment

Commercial
Practices

Competitively
Source
Product
Support

Modernization
Through
Spares

PM
Life Cycle
Responsibility

Increase
Prime
Vendor
& Virtual
Prime
Vendor

Purpose:
Implement Reengineered Product Support Practices

**2005
OUTPUT**

- Improve Customer Service
- Improve Mission Capable Rates
- Reduce Product Support Costs
- Provide Full Asset Visibility

Product Support Scope

912 Scope

- Material Management
- Repair Parts
- Reliability Growth Sustaining Engineering
- Technical Data Management
- Wholesale Distribution
- Maintenance Planning
- Depot Maintenance
- I-Level Maintenance (based on Service Requirements)
- Operator/Maintainer Training
- Configuration Management
- Cataloging

Out of Scope

- 0-Level Maintenance
- Theater Distribution

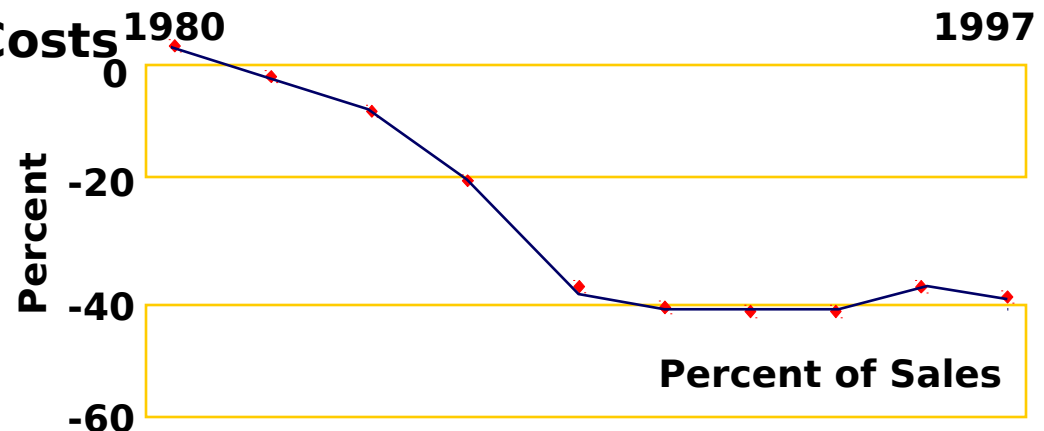
Private Sector Experience

Private Sector Average Logistics Costs for 1997

	% of Sales
• Transportation	4.08%
• Warehousing	2.40%
• Customer Service	0.55%
• Administration	0.36%
• Inventory Carrying	1.81%
<i>Total Logistics Costs</i>	<i>9.02%</i>

Change in Logistics Costs

- Integrated Supply Chains
- Segmented Logistics
- Competitive Strategic Partnerships



The private sector made dramatic cost reductions while improving service during the 1980s.

Source: Herbert W. Davis and Company, Council of Logistics Management Annual Meeting, 5-8 October 1997.

Industry Leaders Use Product Support as a Competitive Advantage

- **Meet scheduled delivery dates 17% more often**
- **Meet customer requested dates 90% of the time**
- **Carry 60% less inventory**
- **Spend 45% less on supply chain costs**

KEY COMPONENTS

- Integrated Supply Chains
- Segmented markets with customer focus
- Competitive Sourcing

Source: Pittiglio Rabin Todd & McGrath

Our Mission: Extend Ongoing Service Initiatives and Couple them with Appropriate Commercial Practices.

Defense Logistics

- **Over \$80 billion per year**
- **Over 1,000 different information systems**
- **Almost 1 million government personnel**
- **Almost \$57 billion of inventory**
- **18 days order-to-receipt for materiel**
- **Low confidence in deliveries**
- **Highly vulnerable (physical and cyber)**



Compelling Event

Operational Requirements

- Highly agile, mobile forces
- Respond within 24 hours, sustain within 7 days
- Minimum customer wait time
- Assured supply
- Total asset visibility, dynamic planning and replanning

Current Situation

- Over 670,000 logisticians deployed in operational units
- Current “best” planning at 75 days to sustain forces
- Logistics response time around 18 days
- Wide variation in processing time
- Over 1,000 disjointed, aging information systems

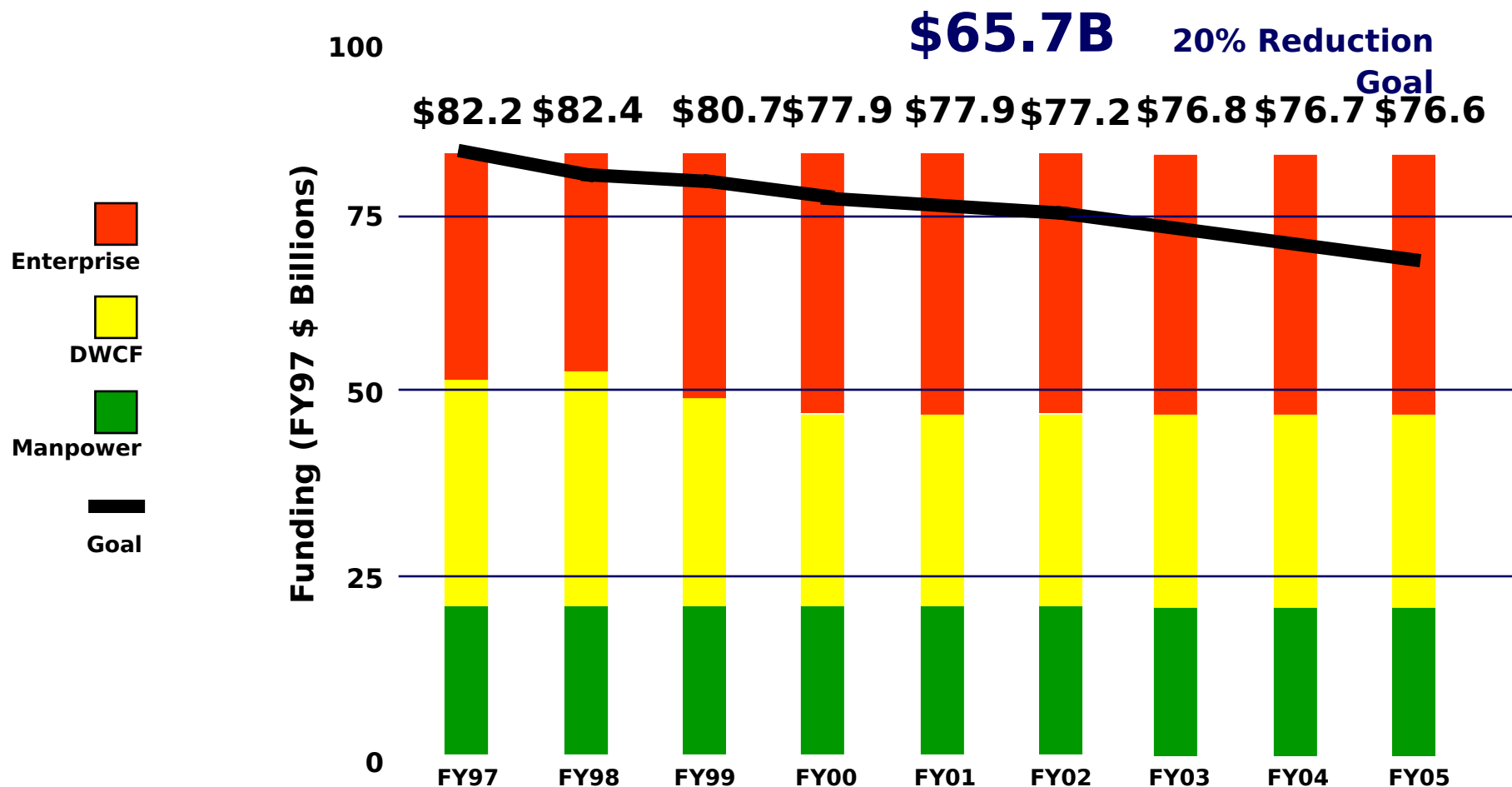
Continuing to Transform our Logistics Process and Infrastructure is an Urgent, National Priority

Current DoD Product Support Baseline

- **Wide variation in service at every segment in the pipeline**
- **Expending approximately \$60 billion/year**
- **875,000 Product Support Personnel**
 - 721,000 at operational levels
- **Aging Information Systems**
- **Constrained by infrastructure inflexibility and inefficiency**
- **Current performance metrics insufficient to capture customer service (functionally centralized)**
- **300 initiatives ongoing within the Services and DLA to improve performance**
 - 165 initiatives directly related to product support

Logistics Cost Baseline

(Based on FY01-05 POM Submission)



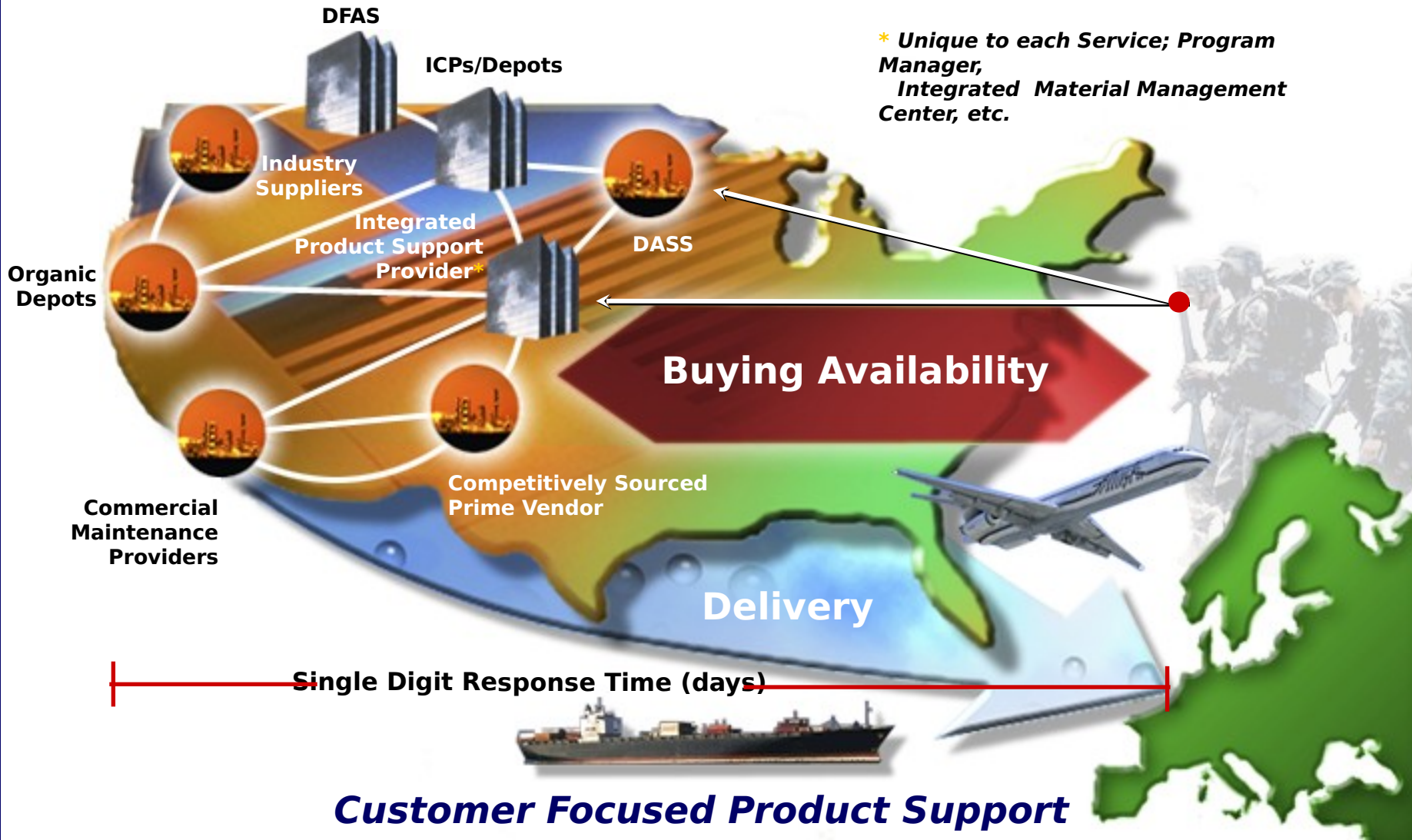
Currently Programmed Initiatives will not Achieve A&T Logistics Cost Reduction Goals

Where We Are Going?

Product Support 2005

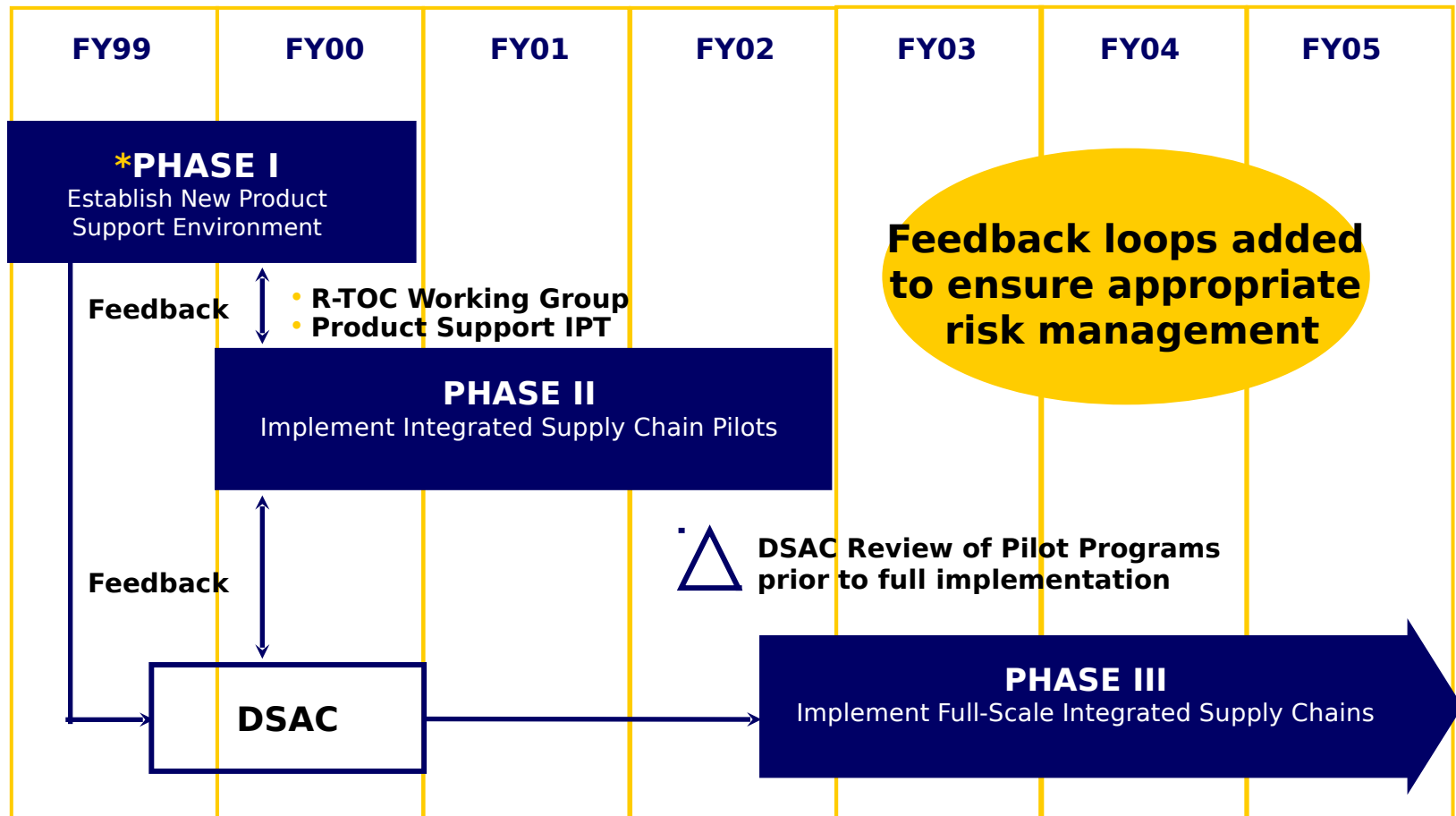
- **Customer relationships based on availability of mission equipment instead of distinct elements (parts, maintenance, data, etc.)**
- **Logistics chains integrated across industry and government; best-value providers selected for long-term partnerships based on competition**
- **Integrated logistics chains focused on customer service and system readiness - driven by the unique military requirements of the Services**
- **Continuous improvement of weapon system RM&S via dedicated investment in technology refreshment**
- **Effective integration of weapon system-focused support to provide total combat logistics**

New Product Support Process



Reengineer Product Support Process

The Overall Strategy



**Extended into FY00 based on Service comments; pacing item is coordination and execution of pilot program strategies*

USCINCPAC Comments

Product Support...For The 21st Century

We will not be able to reform logistics completely until we develop a viable product support program

This document initiates the program



Drive On and Amend as Necessary

USCINCPAC

Critical Implementation Actions

- **Reengineer product support from the warfighter back through the sustaining base**
- **Competitively source product support for all major weapon systems by FY05**
- **Expand prime vendor/virtual prime vendor to all common consumables by FY05**
- **RMS enhancement - Increased funding and incentives for reliability, maintainability, and sustainability**



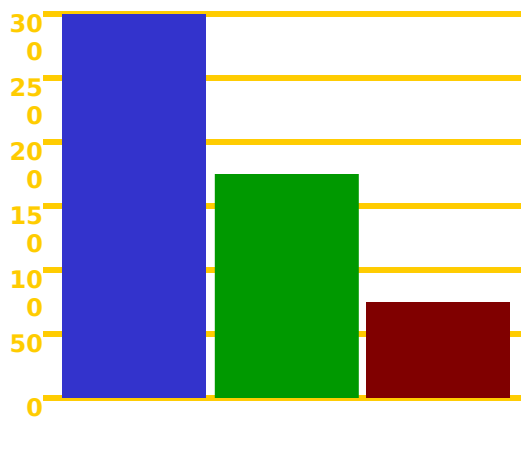
Reengineering Logistics from the Warfighter Back

Outreach to CINCs/MAJCOMs

- Council of logistics directors (J4's)
- CINC/J4's
- Major commands



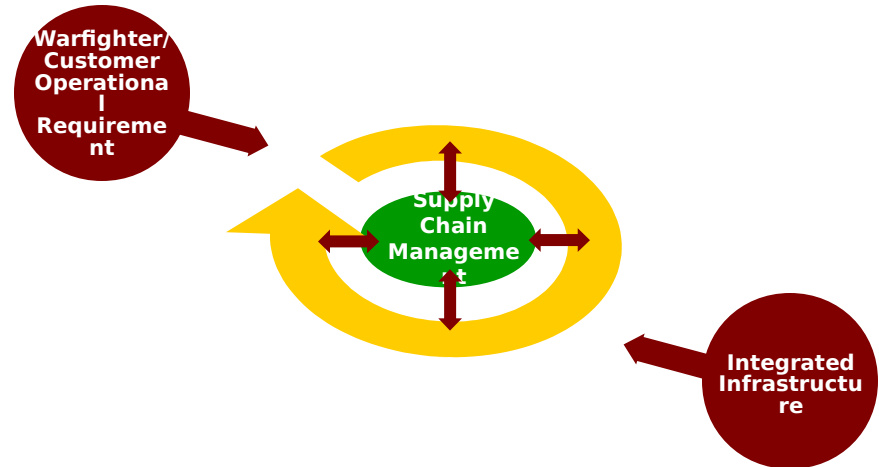
Refine 912 Data Call Response



Continue to Analyze these Initiatives

■ Total Initiatives
■ Reported
■ Metrics

Reengineer Class IX Reparables



Test Product Support in FY01 Flow Game

*"The Way We Go To War **HAS CHANGED**"*

Joint Logistics Warfighting Initiative (JLWI)

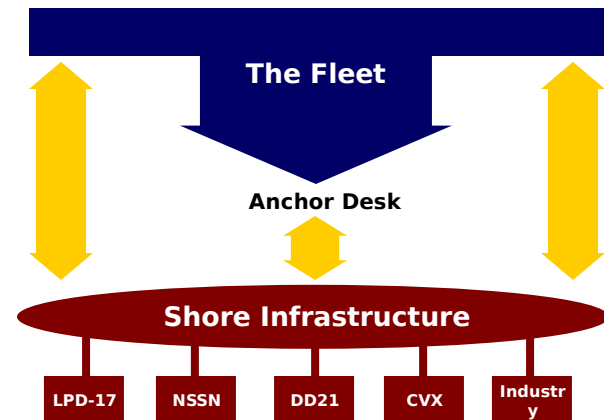
*"The Way We Sustain the Warfight **MUST CHANGE**"*

Reengineering Logistics from the Warfighter Back

1-800-HI-TACOM

- Customer field support by Tank-Automotive and Armaments Command
- One-stop customer telephone assistance for more than 3,000 systems
- 24-hour supply and maintenance help
- Requisition input, modification, and status
- Direct links to R&D and maintenance centers
- Increased readiness from 89% to 93%

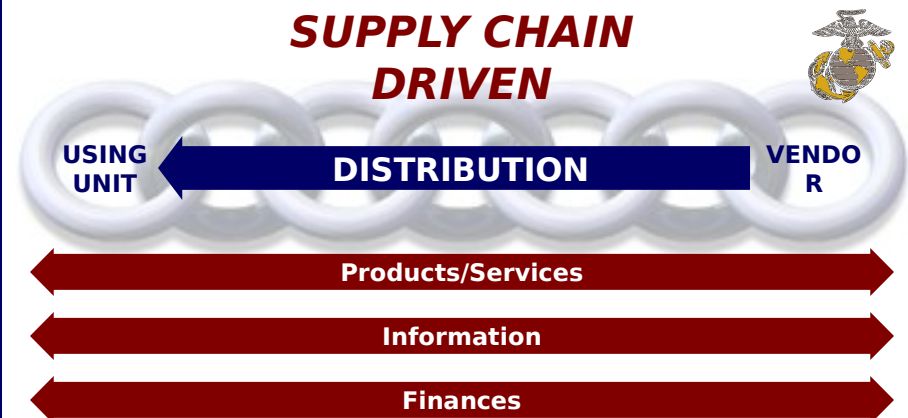
Anchor Desk/Distance Support Initiative



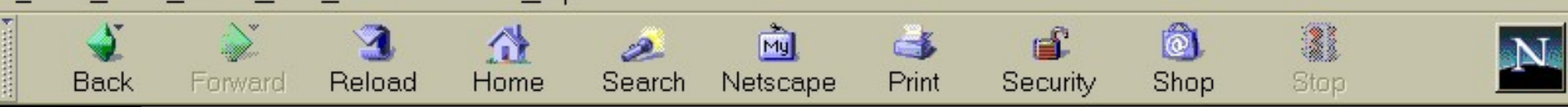
The Anchor Desk/Distance Support Initiative is the Cornerstone of NAVSEA's Product Support Reengineering Strategy.

USMC Integrated Logistic Capability

SUPPLY CHAIN DRIVEN



[Click here to continue to page 21](#)



Distance Support

Collaboration at Sea - Battle Group Support

A world of support
at your fingertips . . .

Transportation Support

Supply Support

Maintenance Support

Engineering Support

Chaplain & Spiritual Support

Personnel Support

Medical Support

Finance Support

Training Support

Ordinance Support



- any issue
- Call/Email for assistance
 - Submit a question online
 - Submit a deficiency report
 - Net Conferencing

More
Support
Links

navigating the
portal

policy

site map

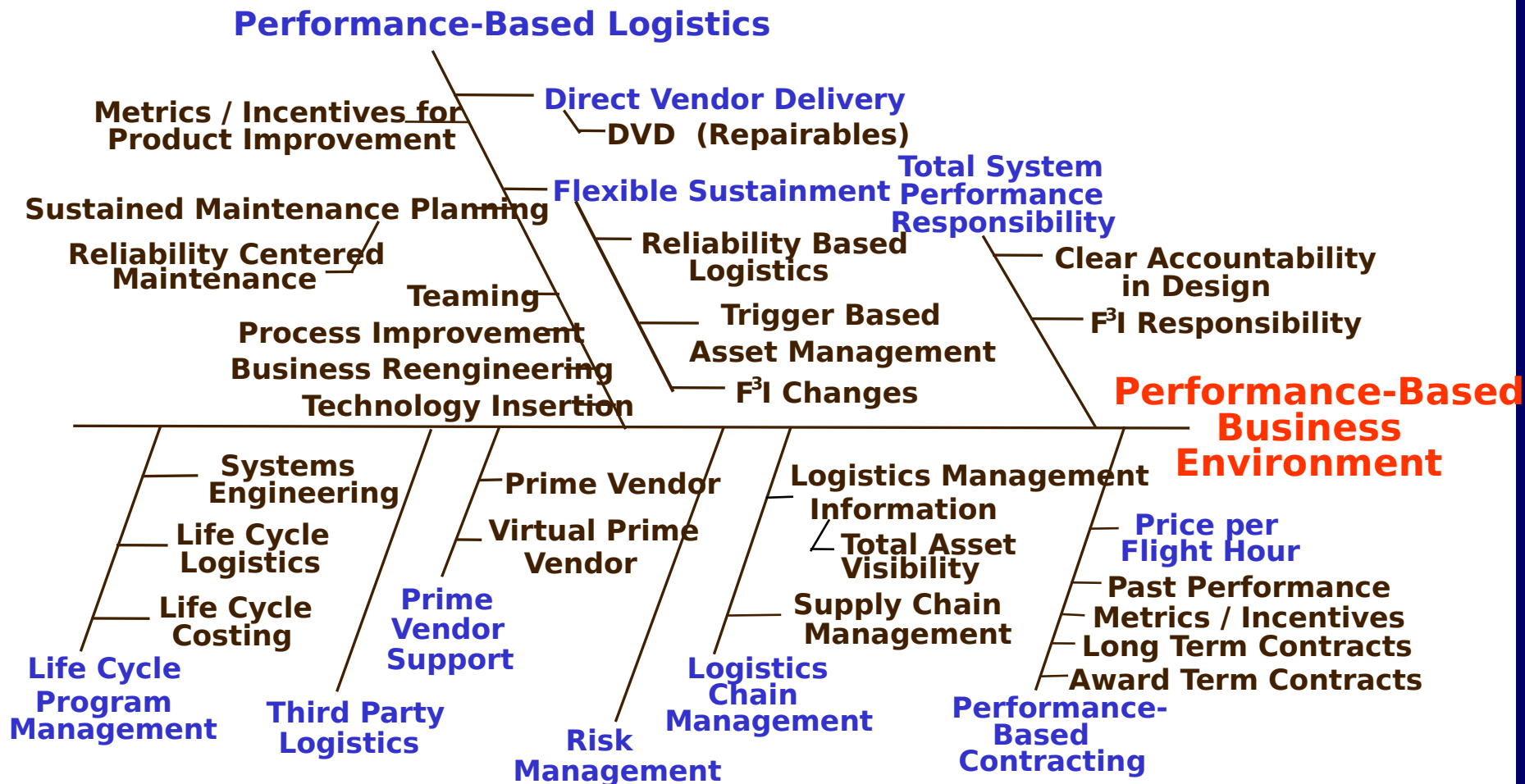
view DS
metrics

"any issue"
help

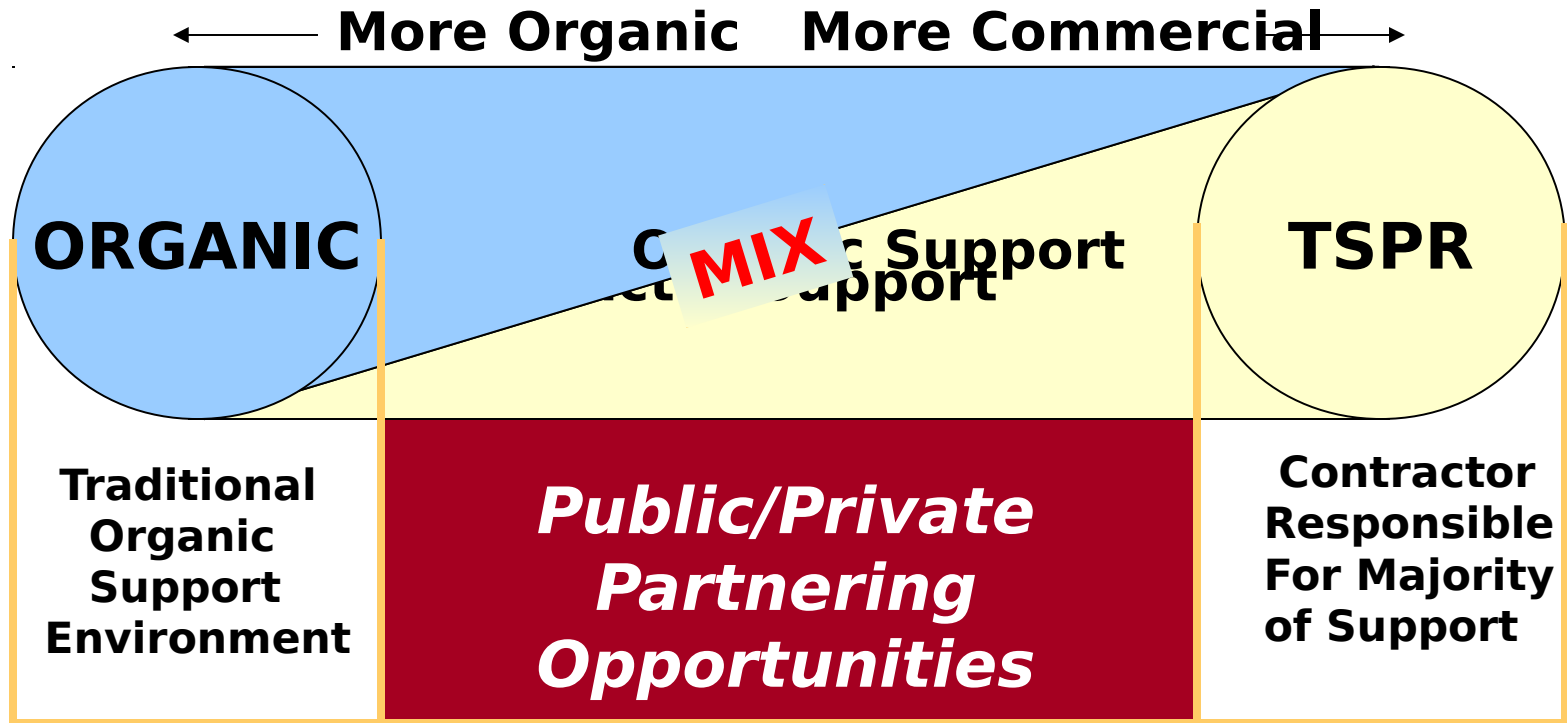
Competitively Source Product Support

- **MAJCOM/CINC customer relationship maintained**
- **Supply chain integration achieved based on specific service requirements**
- **PM and Service Logistics Commands serve as product support “broker”**
- **PMs incentivized to improve supportability**
- **Competitive sourcing achieved via multiple strategies tailored to program and service**
 - “Flexible sustainment”
 - Integrated vertical support
 - Public/private mix
 - Complete organic
 - “Power by the hour”

Performance Based Support

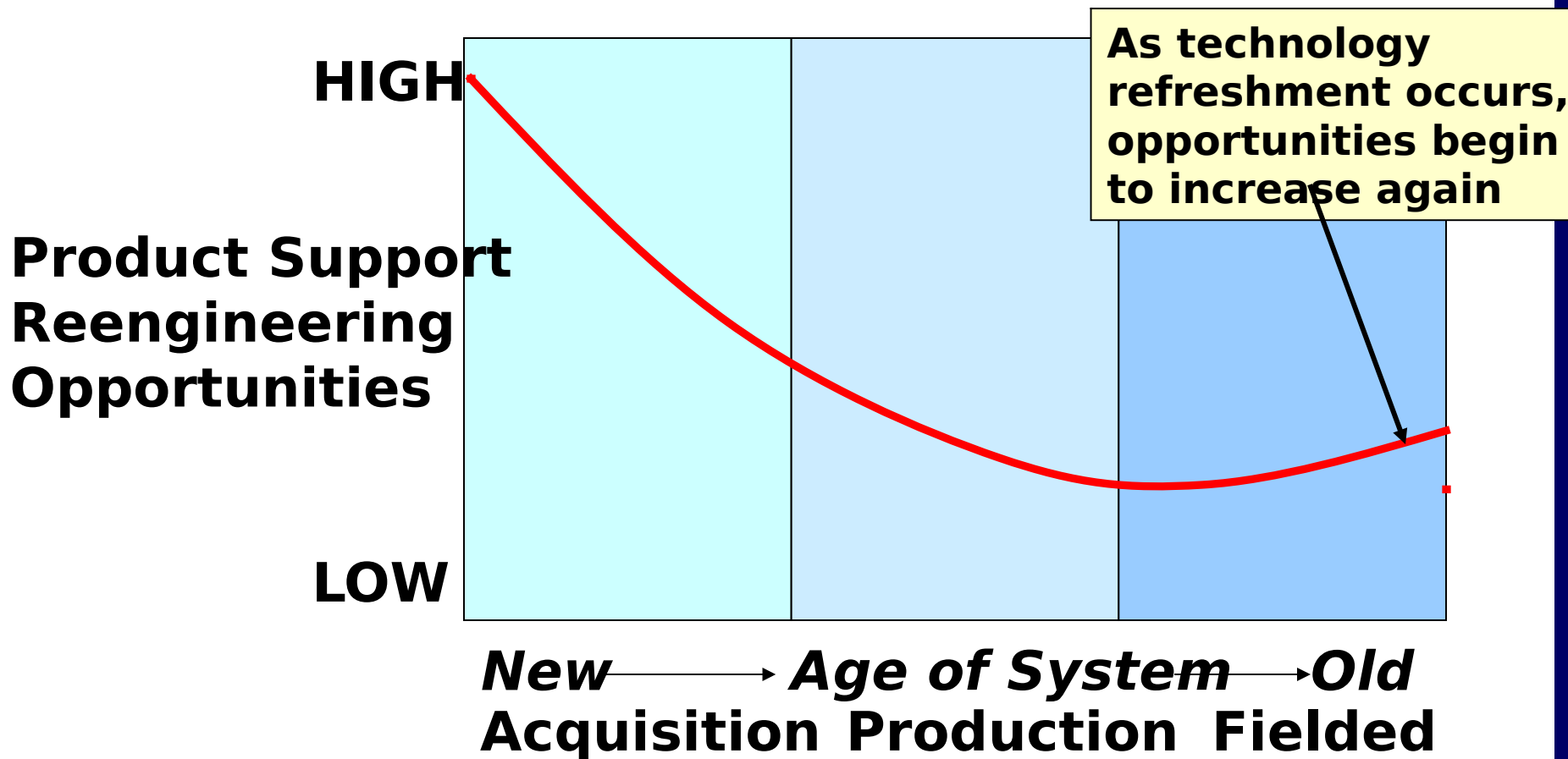


Spectrum of Product Support Strategies



- **Product Support strategies will vary along this spectrum depending on:**
 - **Age of System (Phase in Life Cycle)**
 - **Existing Support Infrastructure**
 - **Organic & Commercial Capabilities**
 - **Legislative and Regulatory Constraints**

Observations



Pilot Programs - Implementing 912 Product Support

Assessment: GOOD

<i>Program</i>	<i>Service</i>	<i>Program</i>	<i>Service</i>
H-60	Navy	LPD-17	Navy
Apache	Army	MTVR	Navy
F-117	USAF	C-17	USAF
MLRS HIMARS	Army	CH-47	Army
TOW ITAS	Army	Comanche	Army
M-1	Army	SBIRS	USAF
AAAV	Navy	Aegis Cruisers	Navy
Crusader	Army	HEMTT	Army
Guardrail	Army	F-16	USAF
J STARS	USAF	B-1	USAF
CMC	USAF	C-5	USAF
AWACS	USAF	ASE/CASS	Navy

Assessment: FAIR/WEAK

<i>Program</i>	<i>Service</i>
CVN-68 Carrier	Navy
C/KC-135	USAF
Common Ship	Navy
SLAM-ER	Navy
AFATDS	Army
EA-6B	Navy

24 pilots embrace 912 PS

- Life cycle competitive sourcing
- Partnering
- Performance Based Logistics
- Prime vendor

USD(AT&L) Objectives

- ✓ Reduced O&S Costs
- ✓ Improved Readiness
- ✓ Increased Performance

Pilot Program Status

- **Pilot Program Forums conducted**
 - August 31- September 1 1999
 - February 3, 2000
 - April 25, 2000
 - August 2, 2000
 - November 8, 2000 (scheduled)
- **Aggressive program strategies being developed**
- **PM's need some help**
 - Funding stability
 - Organizational authority
 - Regulatory/statutory relief
- **Fact Sheets (Public Relations) Under Development**

Defense Planning Guidance FY 2002-2007

Competitive Sourcing of Product Support

Central Logistics (U)

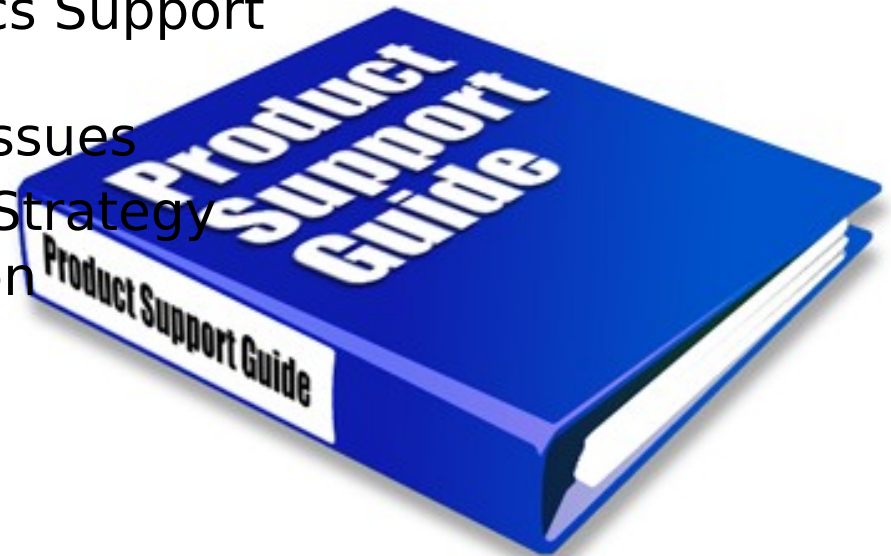
1. (U) National Maintenance and Supply Management.
2. (U) Depot Maintenance.

3. (U) **Competitive Sourcing of Product Support.** Components will review, assess, and report the results of the product support pilot program by January 1, 2002. Components will identify the implementation schedule for competitively-sourced product support strategies for remaining major weapon systems where feasible and economically beneficial. Those schedules will be phased in between FY 2002 and FY 2005, with all programs started by the end of FY 2005. Each component will identify programming to transition the current programs to competitively-sourced product support in the FY 2002-2005 period.

Strategies for Product Support through Competition”

A Tool for Program Offices

- **Translates concepts of 912 report into practical “how to” guide**
- **Focuses on:**
 - Performance Based Logistics (PBL) applications
 - JALB Alternative Logistics Support Concepts
 - Legislative/Regulatory issues
 - Building an Acquisition Strategy
 - Product Support Decision Matrix Methodology



Currently Air Force Oriented - Will become a DoD Document

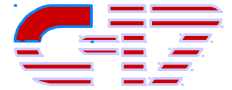
Product Support Decision Matrix

[illegible]

OSD Support for Pilot Programs

- **Committed \$20M to assist pilot PMs in data conversion and information systems**
- **Pursuing legislative relief**
 - 2-year O&M funds
 - Procurement funding of CLS
 - Value engineering
 - Expanded multi-year contract authority
 - increased transaction authority
- **Pursuing regulatory relief**
 - A-76 waivers
 - Financial reform

Flexible Sustainment



- **What Flex is...**

- Major Performance Based Support Contract
- 8 year strategy to support the Operational Fleet while still in production
- Integrated support for both the engine and the airframe
- Combination of ICS, CLS and Organic Support
- Closely monitored program based on mission needs and cost control

- **Pursuing regulatory relief**

- The final depot support decision for the C-17 (Decision due FY03)
- Total or typical CLS-type contract

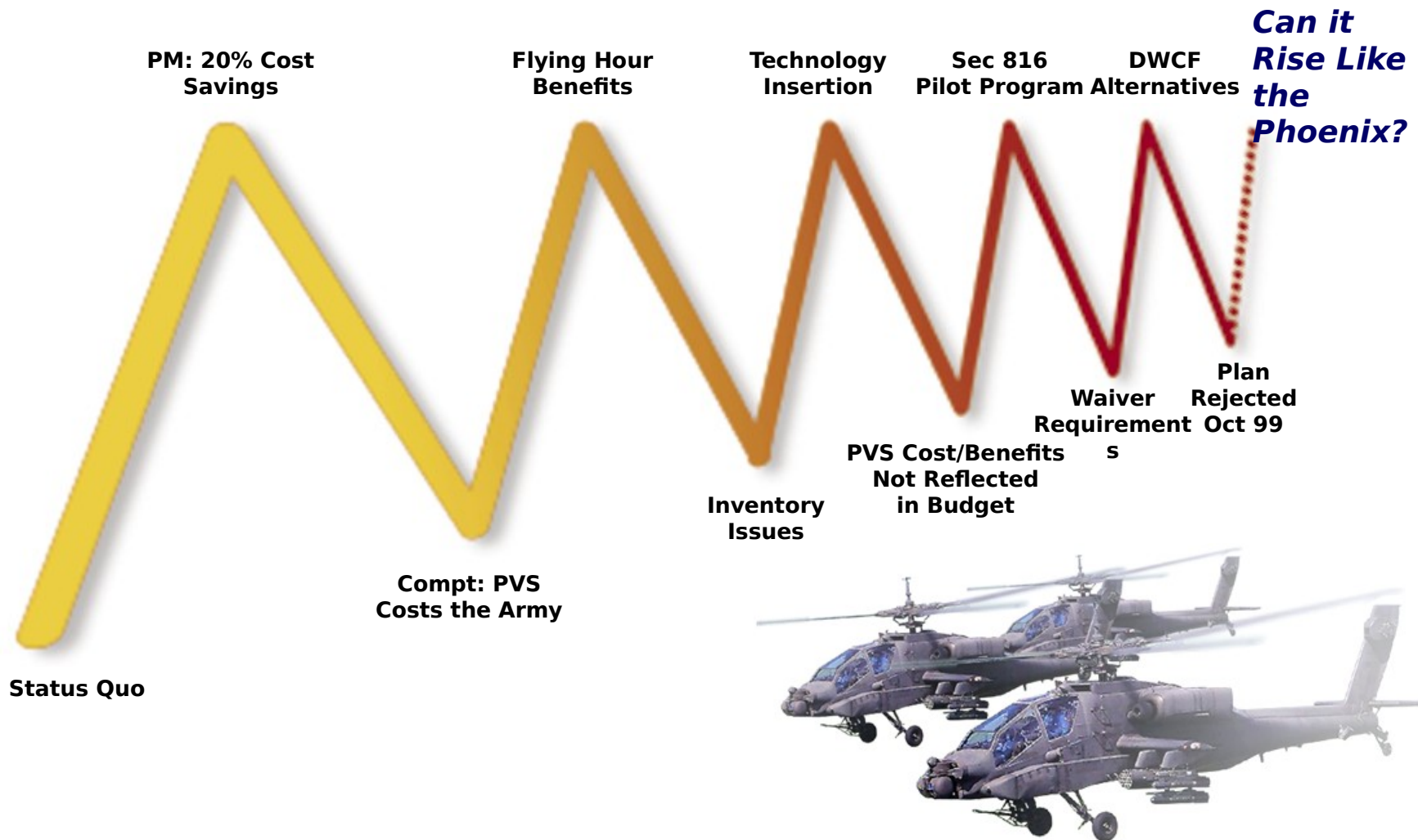


Prime Vendor Support (PVS) Contract Synopsis

- **Firm Fixed Price per flying hour with shared savings**
- **16% reduction in flying hour cost, includes:**
 - 20% increase in flying hours
 - \$320M of system modernization
- **Price commitment for follow-on contract**
- **Field/Deployment support**
 - Technical Representatives (+60)
 - Two rapidly deployable SRA's
- **25,000 flying hour surge capability**
- **life of contract performance warranty**
- **Performance-based guarantees**
 - Stock availability/requisition fill time
 - Non Mission Capable Supply (NMCS)
- **Commitment to small business participation**
- **Catalog to small business participation**
- **Catalog pricing for Foreign Military Sales (FMS)**
- **Increased technical support and workload to Corpus Christi Army Depot (CCAD)**
- **Manage and refresh Army War Reserve (AWR)**



Apache Wars



Cargo Helicopter Life Cycle Management

- **Achieve a 20% reduction in annual Op Tempo costs for the fleet balanced with a 5% increase in Readiness by FY 05**
- **Works within the DoD system**
- **Requires minimal investment from existing sources**
- **Become self-financing**
- **Performance Management and Information Services**
- **Chinook Life Cycle Management Center**
 - Customer Service
 - Common metrics
 - Fleet Management
 - Integrated Weapon System Team



HEMTT DLA - Oshkosh Corporate Contract

Current Contract

- **1,705 NSNs**
- **10 Day Direct Vendor Delivery**
- **5 year contract**
- **FAR Part 15 (Certified Costs)**
- **Electronic Orders (EPPI/POPS)**
- **1200-1400 Orders Processed Monthly**
- **Awarded April 95**
- **Current Contract Ends April**

Successor Contract

- **3,000+ NSNs**
- **5 Day Direct Vendor Delivery**
- **10 year contract**
- **FAR Part 12 (Commercial)**
- **Electronic Orders (EPPI/POPS)**
- **IMPAC Card/Email**
- **Award April 00**
- **Estimated Value > \$50**



2000 61% Reduction in Surcharge to Soldier - from DLA Columbus

Focus on Four Key Initiatives

Tools

Best
Commercial
Practices

Competitively
Source
Product
Support

Modernization
Through
Spares

PM
Life Cycle
Responsibility
(PMOLCS)

Increase
Prime Vendor
&
Virtual
Prime Vendor



Abrams

Pilot

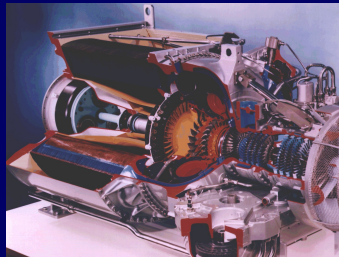
1

2

3

4

Abrams Engine
System



Abrams Integrated
Management
Program (AIM)



Technical
Support



Performance Based
Field Logistics
Support
M1A2 Upgrade





Product Support Plan Scorecard



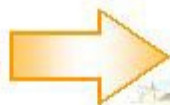
	Best Commercial Practices	Competitive Source Product Support	Modernization Through Spares (MTS)	PM Life Cycle Responsibility (PMOLCS)	Increase Prime Vendor and Virtual Prime Vendor
Abrams Engine System	<ul style="list-style-type: none"> • Inventory Reduction • Increase MTBR • IPT Synchronized Approach • Reduce Demand • Commonality (Wolverine) 	<ul style="list-style-type: none"> • TACOM/Industry Partnership with Anniston (PROSE) • Viable Industrial Base • Quarterly IPR with Customers & Contractors 	<ul style="list-style-type: none"> • Warranty of Spares • Contractor Incentivized to Increase Reliability 	<ul style="list-style-type: none"> • IPT Leader -- Unity of Command • Synergy with Other Tank Efforts 	<ul style="list-style-type: none"> • A/S Commercial Supply Chain Management (SCM) • One Partner Interface • Long Term Partner
AIM Tank Program	<ul style="list-style-type: none"> • Technology Insertion • Long Term Contracting • Economy of Scale • Service Life Extension of Weapon System 		<ul style="list-style-type: none"> • Incorporation of Tank ECPs 	<ul style="list-style-type: none"> • IPT Leader -- Unity of Command • Synergy with Other Tank Efforts 	<ul style="list-style-type: none"> • Long Term Partner
Technical Support	<ul style="list-style-type: none"> • Eliminate Obsolescence • Reduce Inventory Pipeline • Maintenance Man-hours • Reduce Incorrect Diagnosis (No Evidence of Fault [NEOF]) • Increase System Safety 		<ul style="list-style-type: none"> • Redesign High Cost Parts 	<ul style="list-style-type: none"> • IPT Leader -- Unity of Command • Synergy with Other Tank Efforts 	
Performance Based Field Logistics Support M1A2 Unique Components	<ul style="list-style-type: none"> • Reduce Logistics Response Time • Increase Customer Satisfaction • Reduce Overhead Costs 	<ul style="list-style-type: none"> • On-site Support • Improves Training (Organic and Refresher) 	<ul style="list-style-type: none"> • Real Time Failure Feedback and Process Improvement 	<ul style="list-style-type: none"> • IPT Leader -- Unity of Command • Synergy with Other Tank Efforts 	<ul style="list-style-type: none"> • DVD • EDI/EC • Long Term Partner



Focus on O&S Cost Reduction



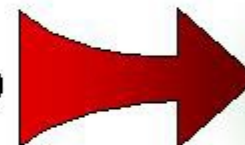
**Current O&S
(4 Pilot Initiatives)
\$31.8B**



**\$4B
Investment**



**Projected O&S
(4 Pilot Initiatives)
\$15.3B**



**\$17.0B
Savings**

(Engine IMP Program)

\$16.1

(AIM Overhaul Program)

13.2

(SSTS/Elec OBS)

1.6

(M1A2 Unique Log Supt)

.9

\$3

(Engine IMP Program)

10.6

(AIM Overhaul Program)

.9

(SSTS/Elec OBS)

.8

(M1A2 Unique Log Supt)

Current O&S

(4 Pilot Initiatives) Program

Projected O&S (30 Years)

With Full Pilot Implementation

Product Support Plan

- **Designing for Support Plan**

- Two Level Maintenance
- Onboard Prognostics/Diagnostics
- Onboard IETMS
- Embedded Training
- Open System Architecture



- **Provide the Warfighter, AAAV Community and PM/Support Organization with worldwide access to AAAV integrated information system**
- **Develop teaming agreements with industry and government**
- **Defining multi-year support contracts with annual award options based on performance**
- **Develop strategy for Scheduled Maintenance/Technology Insertion Program**
- **Life cycle manager for the AAAV/MK-46 weapon system**

Future Support Strategy Concept

- **North-Grumman: Total system support responsibility (TSSR)**

- Integrates NG, subcontractor and Depot efforts
- SAF/AQ concurs with concept of contractor as integrator

- **Partnership between NG and Depot**

- **Competition at subcontractor level**

- **Incentivize performance**

- **Meet intent of source of Repair/Core Decision**

- Phased migration to migrate risks

- **Contract length designed to encourage investment**

- **Permit movement of work as “Best Value” becomes evident and law/regulations allow**



F-117 Stealth Fighter (TSPR)

Total System Performance Requirements

Fiscal Year	NMCS	MICAP Delivery	RSP Kits	Depot Delivery	Depot Quality	Late DRs	WST	Total
Total Pts Available	250	150	150	150	150	100	50	1,000
93*	0	150	150	150	135	100	50	735
94*	175	150	150	150	135	100	50	910
95*	150	150	150	120	135	100	50	855
96*	250	150	150	120	135	100	50	955
97	250	150	150	90	135	100	50	925
98	250	150	150	90	120	100	50	910
99 (Oct-Jul)	250	150	150	150	150	100	50	1000



Performance Metrics

FY98	STD	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Sep-98
MC Rate (%)	80	Y	Y	Y	Y	Y	Y	G	G	G	Y	Y	G	82.9
NMCS Rate (%)	5	G	G	Y	G	Y	Y	G	G	G	G	G	G	5.4
MICAP Delivery (Hrs)	72	G	G	Y	G	G	G	G	G	Y	G	G	G	43.5
RSP Fill Rate (%)	96	G	G	G	G	G	G	G	G	G	G	G	G	98.0
Depot Delivery (Days)	1	R	S	S	S	S	S	S	S	S	S	S	S	0
Depot Quality (Disc)	4:10	G	G	G	G	G	G	G	G	G	G	G	G	3:8
DR Response (#)	1	G	G	G	G	G	G	G	G	G	G	G	G	0
WST Availability (%)	99	G	G	G	G	G	G	G	G	G	G	G	G	99.6
Spare Engines (#)	9	G	G	G	G	G	G	G	G	G	G	G	G	12
FY99	STD	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Jul-99
MC Rate (%)	80	G	G	G	G	G	G	Y	Y	G	G			86.0
NMCS Rate (%)	5	G	G	G	G	G	G	G	G	G	G			2.2
MICAP Delivery (Hrs)	72	G	G	G	G	G	G	G	G	G	G			33.9
RSP Fill Rate (%)	96	G	G	G	G	G	G	G	G	G	G			98.7
Depot Delivery (Days)	1	G	G	G	G	G	G	G	G	G	G			0
Depot Quality (Disc)	4:10	G	G	G	G	G	G	G	G	G	G			3:0
DR Response (#)	1	G	G	G	G	G	G	G	G	G	G			0
WST Availability (%)	99	G	G	G	G	G	G	G	G	G	G			99.8
Spare Engines (#)	9	G	G	G	G	G	G	G	G	G	G			10

Sustainment Metrics

Product Support Plan

H-60 Initiatives Reflect those in 'Product Support for the 21st Century' Implementation Plan



Product Support Element	H-60 Strategy to Comply
"Greatly expand prime vendor and virtual PV arrangements"	Direct vendor delivery contracts
"Competitively source product support"	Performance Board Logistics
Increase funding and incentives for H-60 R/M/S enhancements"	Exempt from NAVAIR AFR set-aside
"Reengineer financial process to support integrated product support practices"	Seek two year O&M Multi-year contracts Seek colorless money Seek relief from reprogramming limitations
"Modernize existing logistics information systems"	Seek revised IM system Seek to develop comprehensive life cycle cost model

ITAS Product Support Reengineering CLS Concept

Retail

No Contractor Required on Battlefield

11H Gunner

- Identifies fault
- Unit calls 27E



27E - ITAS Contact Team (CT)

- Replaces faulty LRU
- Returns unserviceable
- Requisitions replenishment



Free Issue of Repair Parts

SARSS

Garrison

Combat

Transparent to User

Gateway

ITAS Support Handoff Point

Point of Embarkation

Wholesale



Contractor Materiel Management

- Provisioning (wholesale & retail)
- Transportation

Contractor Repair

- Contractor repair facility (Depot)
- Forward repair activity (FRA)



CCAWS Budgets & Contracts

Wholesale = Contractor
Retail = Same as Always

CLS Concept approved by DASA (ALT-LOG) 18 May 99

STRICOM Logistics

Life Cycle Contractor Support



Allows STRICOM to Focus on

- Customer satisfaction
 - Anticipate needs
 - Write a flexible contract
- Readiness
- Cost reduction



Allows STRICOM to Blanket the customer

- On-site support
- Direct communications (STRICOM/Customer)
- Quality people (Ret. Mil.)



- **Description**

- FFP CLS and cost reimbursement spares
- Total system O, I, and D level aircraft CLS
- Ground training system CLS
- Depot maintenance program and administration

- **Performance Objectives**

- Ready for training > 70%
- Continuous lowering of cost/flight hour
- Reduced maintenance man-hour per flight hour
- Improved mean flight hours between failures



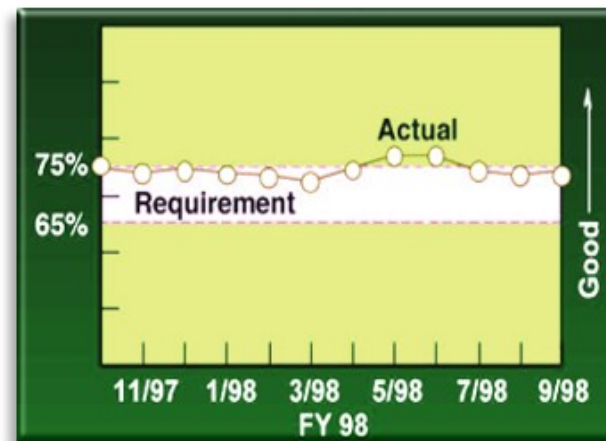
T-45 Program Metrics



Direct Maintenance Manhours per Flight Hour (DMMH/FH)



Aircraft Ready for Training (RFT)



Mean Flight Hours Between Failure (MFHBF)



Navy Logistics Transformation Pillar

Sourcing - What Makes Sense



Shore Activity



- Government Owned
- Government Maintained
- Government Performed

Strategic Sourcing



- A-76
- Functionality Assessment
- Contract Efficiencies

Outsourcing "Brick & Mortar"



- Public Private Venture
- National contracts
- Privatization

TODAY

ONGOING

FUTURE

V-22 Engine



- CLS for T-406
- Power by the hour

LPD-17



- LPD-17 Unique Items... No organic support
- Contractor supply chain

DD 21



- Turn key logistics
- Reduced footprint & manning

Special Operations Forces Support Activity

Integrated Contractor / Government Team

- Modify five new aircraft and forty existing aircraft to mission enhanced configuration
- Develop engineering package for RATT refurbishment
- Overhaul and refurbish RATTs

Results

Achieved:

- Reduced man-hours / aircraft by 2961 hours
- Reduced downtime per aircraft by 38 days
- Goal: To reduce maintenance downtime on each aircraft by 73 days



RATT



Little Bird



Depot Agile Repair Team (DART) Repairing MH-53 Pave Low

Contractors Integrated with 0-Level Maintenance

RM&S Implementation Action

- **Defense Planning Guidance (DPG)**

- FY 00/01 DPG required an additional \$200M/year/Military Department for legacy systems [Accomplished]
- FY 02 DPG requires Military Departments to program RTOC investments to the following levels (FY 02-06): **Army** - \$152M **Navy** - \$237M **USAF** - \$155M

- **Program Budget Decision (PBD 721)**

- No-offset PBD; address balance in DPG
- Provides \$14.1M increased RTOC investment in 01 and \$40.2M in FY 02-05

- **Revised policy**

- Allow use of O&M funds for continuous technology refreshment in fielded systems
(Financial Management Regulations)
- Establish post-fielding continuous technology refreshment as element within 5000 series (ongoing as part of acquisition architecture)

- **Capture and promulgate best practices (e.g., PM-LTV Spiral Modernization)**

- Stabilized funding, planned technology refreshment in sync with commercial technology cycles (being worked via R-TOC)

- **Implement open systems architecture**

Military Services RTOC Initiatives

- **Services have established effective RTOC advocacy**
 - **TOC Plans for most acquisition programs**
 - **Pilot programs used to export success**
- **DoD integrated approach (acquisition, comptroller, programmers) beneficial**
- **Early user involvement and support is essential**
- **Sustaining engineering funds difficult to obtain for out-of-production systems**
- **Key problem is lack of funding for cost reduction initiatives**

Partnering to Reduce TOC

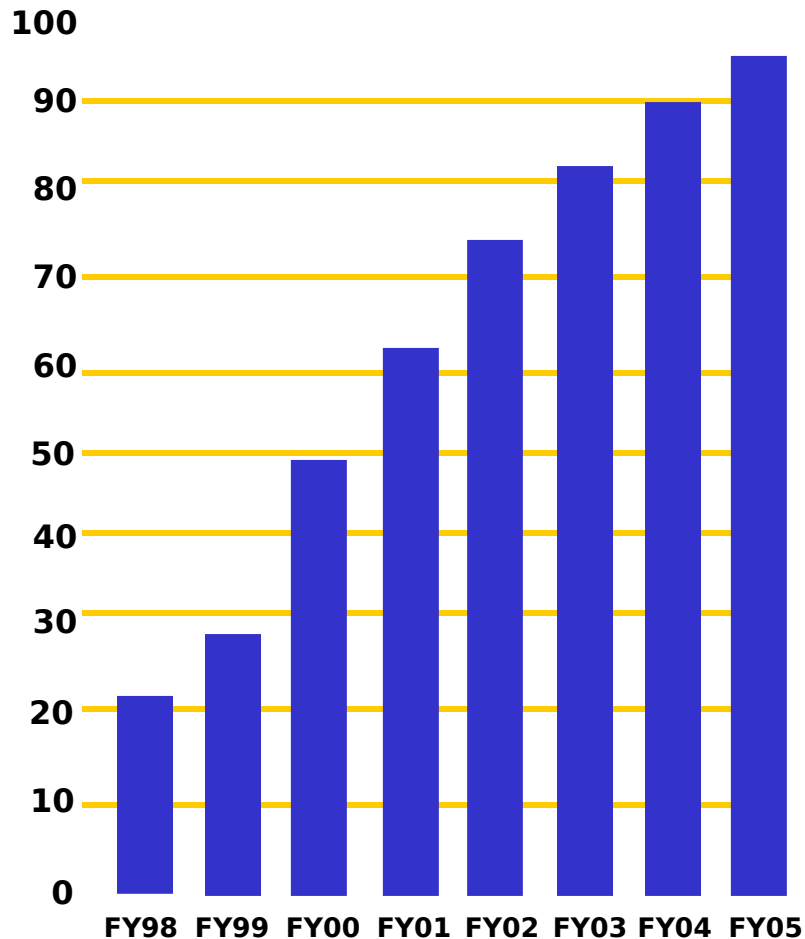
Leadership Direction: Get serious about reducing

*The Mighty Viking S-3B
2008 and beyond*



Expand Prime Vendor/Virtual Prime Vendor

DLA PV/VPV Review Schedule



Issues

- Legislative restraints on depot workload for reparable components
- DoD/vendor data transaction incompatibilities
- PM recognition of advantages of PV/VPV
- Application of VPV to complex items

Actions

- Identify logical “groupings” to enable expansion
- Increase DoD/vendor integration in ordering, status, transportation (ANSIX.12)
- Aggressively perform market research/business case analysis

Expand Prime Vendor/Virtual Prime Vendor

Prime Vendor

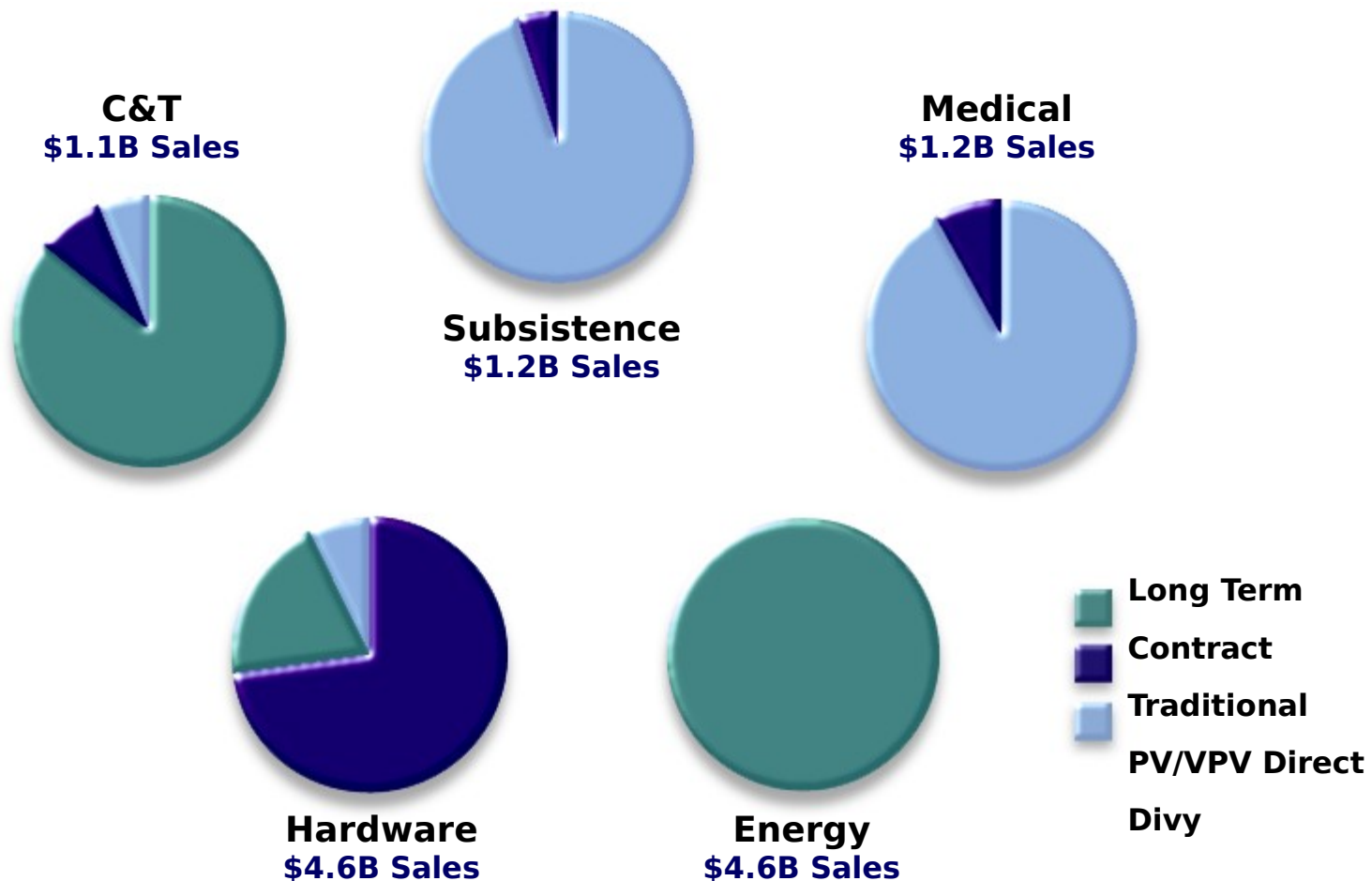
- Partnership for market ready or commercial products
- Employs commercial pricing
- Includes established distribution arrangements
- Ex: Maintenance, Repair, and Operation PV for Facility Maintenance (DLA/Marine Corps)

Virtual Prime Vendor

- Partnership with integrated logistics manager for consumables or reparable material
- May include depot repair, obsolescence management, technology insertion, configuration management
- Typically involves negotiated pricing and distribution
- Ex: C-130 Hub and Blades VPV (DLA/Air

DLA Shift to Commercial Practices for Class IX Items (Current Status)

% of Sales



The Next Step - Strategic Supplier Alliance

■ Honeywell Strategic Supplier Alliance - The Prototype Effort

■ Rapid Improvement Team (RIT)

“Ensuring, whenever appropriate, a single contracting officer or item manager is responsible for negotiating all contracts from a single contractor for the procurement of exempt commercial items.”

■ Concept of commercial contracts and business practices introduced as a tool for leveraging DoD buying power to:

- Reduce Total Ownership Cost
- Improve Support to End User
- Reduce Inventory for DoD and Suppliers
- Improve Strategic Supplier Satisfaction
- Implement Acquisition Reform Initiatives
- Institutionalize Lead Center Concept



Key Enabling Actions

**Foster a competitive supplier base
for product support**

**Reengineer financial processes to support
integrated product support practices**

**Modernize existing logistics information systems to
enable seamless, secure provision of product support**

Foster a Competitive Supplier Base

Our Objectives

- Capitalize on existing, competitive commercial base for product support services
- Maintain competitive pressure throughout life cycle
- Ensure cost-effective product support during retirement phase

Our Experience

- Integrated product support provided by OEMs
- Successful public/private competitions for pieces of product support
- Long tradition of investing in supplier base development

Immediate Actions

- Assess and define barriers
- Identify strategies to overcome barriers
- Integrate actions with other initiatives
- Test processes through pilot programs

Barriers to Competitive Base

- High capital costs to develop facilities and equipment
- Systems knowledge of complex DoD systems; access to comprehensive technical data
- Procurement practices that discourage commercial vendor participation

Reengineer Financial Processes to...

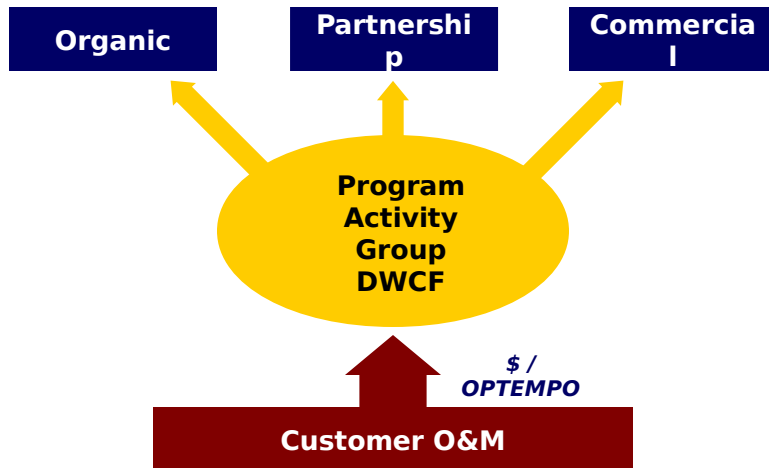
Support Integrated Product Support Practices

- **Current DWCF structure established to enable customer transactions within functions**
 - Supply
 - Maintenance
 - Transportation
- **Customer appropriations also received with functional intent**
 - Supply
 - Maintenance
- **Customer has exercised a great deal of flexibility in allocating O&M funds**
 - Move to finance mechanism that fosters integrated support and “output” arrangements
- **Direct appropriations to PM do not appear promising**

Pursuing Development of New WCF Product Support Activity Code with USD(C)

Reengineering Financial Process Implementation

DWCF Alternative Approaches



CH-47 Pilot Program

“Commercial Airline Approach”

- Establishes an accurate baseline for identifying initiatives and measuring change
- Relate cost and downtime to aircraft metrics
- Create an integrated management team that functions as an Aviation Board of Directors

DWCF Reform Task Force

- **Change Pricing Structure**
 - Allow “marginal” pricing supplemented by recovery of fixed costs
 - Modify FMR to insure military unique features are excludable from DWCF rates
 - Establish a budget exhibit and justification process to firmly establish unutilized and underutilized plant capacity and war mobilization funding requirements
- **Recommendation to Dep Sec Def in Nov/Dec 99**

Army Guidance for CTR



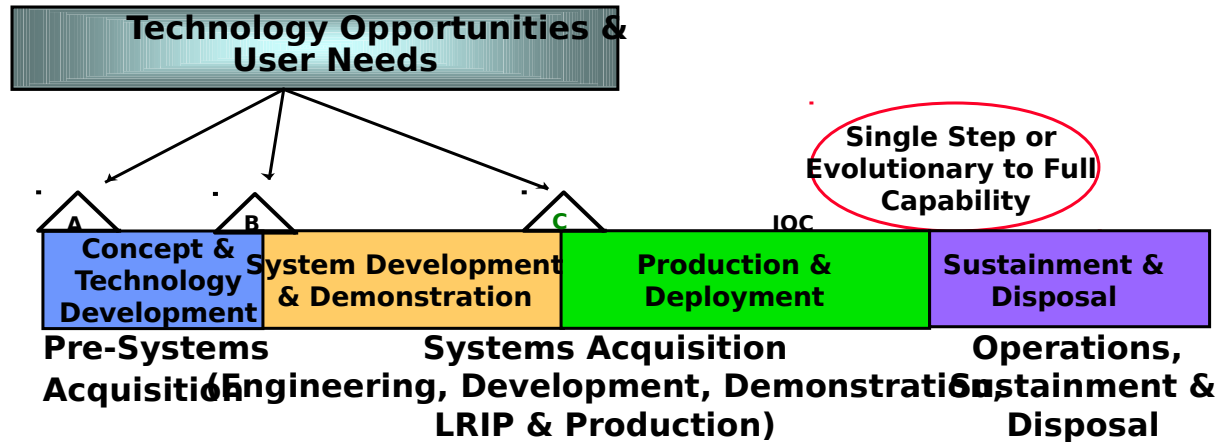
***Army Memorandum
Providing Guidance
Regarding
Appropriation
Source for Continuous
Technology
Refreshment (CTR) for
Spares***

Click here to continue to page 61

Longer Term Enabling Actions

- **Revise DoD policies to institutionalize results of pilot programs**
- **Provide training and education for the future product support workforce**
- **Develop effective performance measurements systems based on customer service**
- **Improve cost management processes and systems**
- **Test reengineered processes via simulation and operational experiments**

DoD 5000 Acquisition Policy Revision



Major Objectives

- **Develop a new acquisition model that reduces cost and cycle time while delivering improved performance**

- Rapid acquisition with demonstrated technology
- Time-phased requirements and evolutionary development

- **Move DoD closer to a commercial-style approach**

- **Implement Section 912 recommendations**

- Integration of acquisition and logistics
- Product support emphasis
- Increased competition

- **Cost as a requirement that drives design,**

DoD 5000.2-R Revised Policy (Draft)

2.7.1. Product Support

The PM, in coordination with Military Service logistics commands, shall serve as the focal point for product support and will provide product support management over the weapon system life. The PM may select a product support integrator from the DoD or private sector. Activities coordinated by support integrators can include, as appropriate, functions provided by organic organizations, private sector providers, or a partnership between organic and private sector providers.

2.7.2.2. Supply Source of Support

The PM shall select a source of supply support that give the PM and the support integrator sufficient control over financial and support functions to effectively make tradeoff decisions that affect system readiness and cost.

2.7.6. Life Cycle Support Oversight

The support strategy shall address how the PM and other responsible organizations will maintain appropriate oversight of the fielded system so that performance, readiness, ownership cost, and support issues can be identified and properly addressed. Post deployment evaluation will be an integral element of system oversight. Oversight shall be consistent with the written charter of the PM's authority, responsibilities, and accountability for accomplishing approved program objectives (see DoDI 5000.2, para. 4.1)

Workforce for 21st Century

VISION: Create knowledgeable Logistics Workforce to deliver 21st Century support to Program Executives, Program Managers, and Field Activities who support the Fleet.

MISSION: Train, maintain, and support a Logistics Workforce to attain the highest level of expertise and experience required to provide Best Value Logistics to our customers.

**PEO/PM
Outreach**

**Intern
Program**

**DAWIA
Certification**

**Career
Training**

**People Are Our Greatest
Asset**



Product Support Virtual IPT Web Site



Product Support Virtual IPT Web Site



Product Support Virtual IPT Web Site



Product Support Virtual IPT Web Site



Highlights: From Plans

- **Pilot programs embraced the challenge to develop Product Support concepts/innovations**
- **Variety of Proposed Support Arrangements**
 - **Performance-oriented Contracts**
 - **Award Term incentives**
 - **Long-term Support Arrangements**
 - **Sharing in cost reduction initiatives**
 - **Service Level Agreements**
- **Extensive work under way to identify partnering opportunities - most begin at joint (e.g. KTR-Gov IPT) planning stage**
- **Next phase is critical: Detailed planning & strategy development supported by BCAs**

Highlights: Lessons Learned

- **Building/coordinating an innovative product support strategy takes time**
- **SPD ultimately responsible for customer satisfaction even under TSPR arrangement**
- **Involve all stakeholders early**
- **Start sustainment planning early**
- **Partnering should start early and is a continual process**
- **Structure performance incentives to maximize desired performance - performance incentives work**
- **Under TSPR, build in “off ramps” (recompetition; return to organic)**

Observations

- **Implementing product support is as much a cultural change as a process change**
- **Instituting a cultural change requires**
 - **Continuous education**
 - **Leadership commitment and support**
 - **Continued involvement of ALL stakeholders (Warfighter, Sustainment Commands, Headquarters)**

Summary

- **Product support is a critical component of acquisition-logistics reform.**
- **Product support is driven by best practices and is viable for the long-term.**
- **Since the issuance of the Product Support Report last July, implementation momentum has picked up.**
- **DoD Components are pursuing wide variety of implementation vehicles.**
 - **SOCOM Cradle-to-Grave Implementation**
 - **Army TOCR, RECAP, and Life Cycle Support**
 - **Navy Log Transformation, TOC Reduction**
 - **USAF LB 99-7, Partnering, SLAs**
 - **DLA Lead Center WSSMs, SSAs, PV/VPV/other commercial approaches**

BACK-UP